

ABSTRACT OF THE DISCLOSURE

The present invention is a punch device for a substrate having a large breadth and small thickness. The device comprises a mechanism for winding and unwinding, a correcting control unit, a tension control unit, a hydraulic mechanism, a punch mechanism, a high frequency and high voltage generator, a detecting unit, a controlling means for speed, a pulse frequency and pulse width control, and an user interface. The device is characterized in that the punching mechanism is composed of at least two or more electrode matrixes. Each electrode matrix is made up of a plurality of electrode bars longitudinally arrayed that form an angle α with the movement direction of the substrate. Each pair of the electrode bars is composed of an anode bar and a cathode bar on either side of the substrate. Each bar is provided with electrode-pins in the number of M. The advantage of the present invention is that a unit area of the substrate to be processed can be punched multiple times when it passes through the working area. Thus, not only a strip in the order of a millimeter can be punched, but also a surface in the order of a meter in width, especially in the breadth direction, can be punched evenly.